



city of san luis obispo

919 Palm Street; San Luis Obispo, CA 93401

ADDENDUM

DATE:	April 14, 2017	
PROJECT:	Membrane Equipment System	SPECIFICATION NO. 91539
ADDENDUM NO.:	3	
BID DATE:	April 20, 2017	

NOTICE TO ALL CONTRACTORS SUBMITTING PROPOSALS:

You are hereby notified of the following changes, clarifications or modifications to the Request for Proposal. This addendum shall supersede the original Request for Proposal. Wherein this addendum contradicts the original Request for Proposal, this addendum shall take precedence. All other conditions shall remain unchanged. The change specified below shall become a legal part of the Request for Proposal.

A. CHANGES AND/OR CLARIFICATIONS TO THE Request For Proposal as attached and below.

- Question:** 40 99 90, Page 2, D.1.b. 2) - Data not required to be mapped in EtherNet/IP.

Response: Provide per specification Section 40 99 90.
- Question:** 40 99 90, Page 3, 1.02.A.5.a - As it is not specified, we assume that the control panel is to be installed in unclassified locations.

Response: Refer to the attached (2 pages), "Addendum No. 3 to the Contract Documents for the procurement of the Membrane Equipment System for the San Luis Obispo Water Resource Recovery Facility, dated April 14, 2017."
- Question:** 40 99 90, Page 3, 1.02.A.5.d. and 40 99 90, Page 7, 1.04.A.5.c. - We generally find that loop drawings do not offer additional information beyond what is shown in single line electrical drawings. We request that the requirement for loop drawings be removed. For reference, the following information is included in our electrical submittals if not otherwise specified: Electrical Schematic Diagrams, Panel Layout Drawings (Electrical Assembly Diagrams, Panel Assembly Diagrams, Enclosure Mach Diagrams) along with Single line diagrams/load lists and Control Network Architecture drawings from which all necessary electrical design information can be acquired.

Response: Provide per specification Section 40 99 90.
- Question:** 40 99 90, Page 7, 1.04.A.8 - As we are not the systems integrator, interconnection details are outside of our scope of supply and not included.

Response: Refer to the attached (2 pages), "Addendum No. 3 to the Contract Documents for the procurement of the Membrane Equipment System for the San Luis Obispo Water Resource Recovery Facility, dated April 14, 2017."

5. **Question:** 40 99 90, Page 17, J.1 and 2 - We assume control panel to be installed in unclassified locations and Intrinsic Safety Barriers are not provided.

Response: Refer to the attached (2 pages), "Addendum No. 3 to the Contract Documents for the procurement of the Membrane Equipment System for the San Luis Obispo Water Resource Recovery Facility, dated April 14, 2017."

6. **Question:** 43 32 56, Page 22, 2 - Please clarify what the following means. Are we providing an entire redundant main control panel in addition to the main control panel with a hot backup PLC? "Provide redundant Large-Package PLC, per Section 40 99 90, Package Control Systems, for the membrane system Master PLC. This PLC will be in addition to the installed Hot-Backup PLC provided."

Response: Refer to the attached (2 pages), "Addendum No. 3 to the Contract Documents for the procurement of the Membrane Equipment System for the San Luis Obispo Water Resource Recovery Facility, dated April 14, 2017."

7. **Question:** Schedule A, Note 1 – The referenced note says that values shall be for all trains in service. This creates a few issues for the system design:

- a. Normal operating procedures would dictate that cells come in and out of service as influent flow to the plant varies, and the proposed supplier PLC would include logic for this to occur automatically or by operator selection. The PLC logic would be structured to provide the most efficient operation of the plant and to allow operator flexibility.
- b. Normal design uses one filtrate pump per cell, or one pumping system consisting of two or more pumps per cell. Designing these pumps to operate at the peak flow of 16 MGD and as low as 1.0 MGD will create challenges to make these pumps operable and efficient at all operating points.
- c. There are several alternatives to make operating all cells during low-flow periods possible (creating a dedicated pumping system that is shared in common with all cells; designing each pumping system with 3-4 centrifugal pumps or 2 or more positive displacement pumps). None of these alternatives are really providing the best value for the customer, but would provide the best output in total cost of ownership per the specification requirements.

We respectfully request that this note be modified such that manufacturers can state how many cells would be in operation at each flow rate, and to state the flux at each point of operation. Flux should be supported by flux references as shown on Schedule F. This will allow manufacturers to select equipment that will provide the best total value for the end user.

Response: Refer to the attached (2 pages), "Addendum No. 3 to the Contract Documents for the procurement of the Membrane Equipment System for the San Luis Obispo Water Resource Recovery Facility, dated April 14, 2017."

8. **Question:** *There's a conflict in the valve spec. You are asking for V514 high performance valves, and allow ST&H as an approved manufacturer. You specify STL-**SR** model which is not ST&H's high performance model. The correct high performance model is STL-**HL**. For V500 type valves they specify STL-SR which is correct for that type. I am assuming that for V514 you do want the -HL model which is the high performance valve. Can you confirm?*

Response: *Refer to the attached (2 pages), "Addendum No. 3 to the Contract Documents for the procurement of the Membrane Equipment System for the San Luis Obispo Water Resource Recovery Facility, dated April 14, 2017."*

9. **Question:** *Section 00 21 14 – Instruction to Proposers. Paragraph 18 - Opening of Proposals - Please confirm that the proposals, and which portions of the proposals, will be read aloud at the time of opening.*

Response: *The following information will be read aloud at the Proposal Opening on April 20, 2017: Proposer name, confirmation that submitted proposal was received at or prior to 3:00 pm per Section 00 11 14, Request for Proposals and the proposal cost.*

Contractors are required to base their proposal on the plans, specifications and any issued addenda. To do otherwise shall be at the Contractor's own risk.

Contractors shall note the acknowledgment of this addendum in the appropriate space provided on the Proposal Form.

If you have any questions contact Jennifer Phillips at Jennifer.Phillips16@ch2m.com or (480) 377-6281.

ADDENDUM NO. 3
 TO THE CONTRACT DOCUMENTS
 for the procurement of the
 MEMBRANE EQUIPMENT SYSTEM
 for the
 SAN LUIS OBISPO WATER RESOURCE
 RECOVERY FACILITY

Date: April 14, 2017
 Project No.: 668876

To All Planholders and/or Prospective Bidders:

The following changes, additions, and/or deletions are hereby made a part of the Contract Documents for the procurement of the Membrane Equipment System for the San Luis Obispo Water Resource Recovery Facility dated March 2017 as fully and completely as if the same were fully set forth therein:

A. PART 1—BIDDING REQUIREMENTS

1. Section 00 41 63, Proposal. Supplement Schedule "A" Worksheets. Pages 1, 2, and 3. DELETE "Notes to Proposers. 1)" and REPLACE with the following:

“Notes to Proposers: 1) Values provided on these worksheets shall be for all membrane trains in duty or standby operation, as required for the flow condition. Assume membrane trains always contain mixed liquor except during cleaning cycles.”

B. PART 4—SPECIFICATIONS

1. Section 01 61 01, Product Requirements. Page 1, Article 1.03 Environmental Requirements. ADD the following:

“C. Equipment and devices will be installed in an unclassified area.”

2. Section 40 27 02, Process Valves and Operators. Page 9, Article 2.04 Valves, Paragraph C. Butterfly Valves, Subparagraph 4. Type V514 High Performance Butterfly Valve 2 Inches to 36 Inches, Item c. Alternatively.

- a. Item 2). DELETE in its entirety and REPLACE with the following:

“2) Stainless steel body, stainless steel disk, PTFE seat, rated to 188 psig working shutoff pressure.”

- b. Item 3) Manufacturer and Product. DELETE in its entirety and REPLACE with the following:

“3) Manufacturer and Product:
 a. ST&H Corporation: STHL.”

3. Section 40 99 90, Package Control Systems.
 - a. Page 7, Article 1.04 Submittals, Paragraph A. Action Submittals, Subparagraph 8. Add the following:

“Coordinate with Construction Contractor for external interface termination details.”
 - b. Page 17, Article 2.05 Control Panel Electrical, Paragraph J. Intrinsic Safety Barriers. DELETE in its entirety.
4. Section 43 32 56, Membrane Equipment System (Membrane Bioreactor). Page 22, Article 2.07 Control System. Paragraph E. PLC Configuration, Subparagraph 2. DELETE in its entirety and REPLACE with the following:
 - “2. Provide redundant Large-Package PLC, per Section 40 99 90, Package Control Systems, for the membrane system Master PLC.
 - a. Each PLC controller shall have enough data memory to store twice the amount of tag data that is associated with a redundant controller project, plus an additional 25 percent spare capacity.
 - b. Train PLCs shall follow either Large-Package PLC or Small-Package PLC, per Section 40 99 90, Package Control Systems. Vendor may opt to not provide Train PLCs and use Remote I/O per train. Remote I/O will follow Large-Package PLC standard.
 - c. Connect remote train PLCs via Ethernet/IP Device Level Ring network. Implement this network independent from the Ethernet/IP network for connection to the Plant Control System. Seller will work with Engineer to ensure fiber optic ring topology is dedicated for this PLC communication.
 - d. OIU Supplier and Product: Provide OIU at the Master PLC panel to meet the function description and to interface with the Plant Control System. Refer to Section 40 99 90, Package Control Systems, for additional requirements.”

All Bidders shall acknowledge receipt and acceptance of this Addendum No. 3 in the Bid Form or by submitting the Addendum with the bid package. Bid Forms submitted without acknowledgment or without this Addendum will be considered in nonconformance.

CH2M HILL



David Jones

END OF ADDENDUM